

Work Order ID 85377

June-07-12 9:19:46 AM

85377

Page 1

Item ID: D412-698-028

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bracket Assembly, RH (Aluminum Doors)

Start Date: 07/06/2012 **Start Qty:** 2.00 *2*

Required Date: 21/06/2012 **Req'd Qty:** 2.00 *2*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: M^LJ

Date: 12/06/02 Tooling:

Date:

Run Start

NR1

QC:

Date: SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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DSI 9484	C
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100	
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100

DC

Document Control

Memo

Photocopy bluefile & type labels per PPP D412-698-028/ DSI9484
CHG003

JB 5.7.02

for M^LJ 12-6-27
②

110	
-----	--

110

Packaging

Packaging

Pick Kit

0.00

2

12/06/27JB

81

120	
-----	--

120

QC

Quality Control

QC4- 100% Inspect kits for completeness

0.00

6.7.02/03

CP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 85377

June-07-12 9:19:46 AM

85377

Page 2

Item ID: D412-698-028

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bracket Assembly, RH (Aluminum Doors)

Stop

NS2

Start Date: 07/06/2012 Start Qty: 2.00 *2*

Cust Item ID:

Required Date: 21/06/2012 Req'd Qty: 2.00 *2*

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Memo	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130			0.00							
130	Packaging	Identify and pack for shipping as per PPP D412-698-028/ DS1 9484 Location: _____ PPP rev: _____ B.	0.00				2x			12-7-3,
140	QC	QC21- Final Inspection - Work Order Release	0.00							
140	Quality Control	Memo	0.00							

MF
12.07.03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-07-12 9:19:52 AM

Page 1

Work Order ID: 85377

85377

Parent Item: D412-698-028

D412-698-028

Parent Item Name: Bracket Assembly, RH (Aluminum Doors)

Start Date: 07/06/2012

Required Date: 21/06/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP RevA: new issue DD 09.11.30 verified by:EC
11.03.31 AS PER ECN11-531 verified by:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3199-4 *D3199-4* Bracket, Fwd RH		Manufactured	No			110	Each	43.0000	1	2	✓	JB	8A

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST236B	43	
77735	43	<u>77735</u>

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43
REF. FAA STC: SR01446NY
REF. EASA.I.M.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket. Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

PARTS LIST

QTY -027	QTY. -028	QTY. -037	QTY. -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
	1			D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

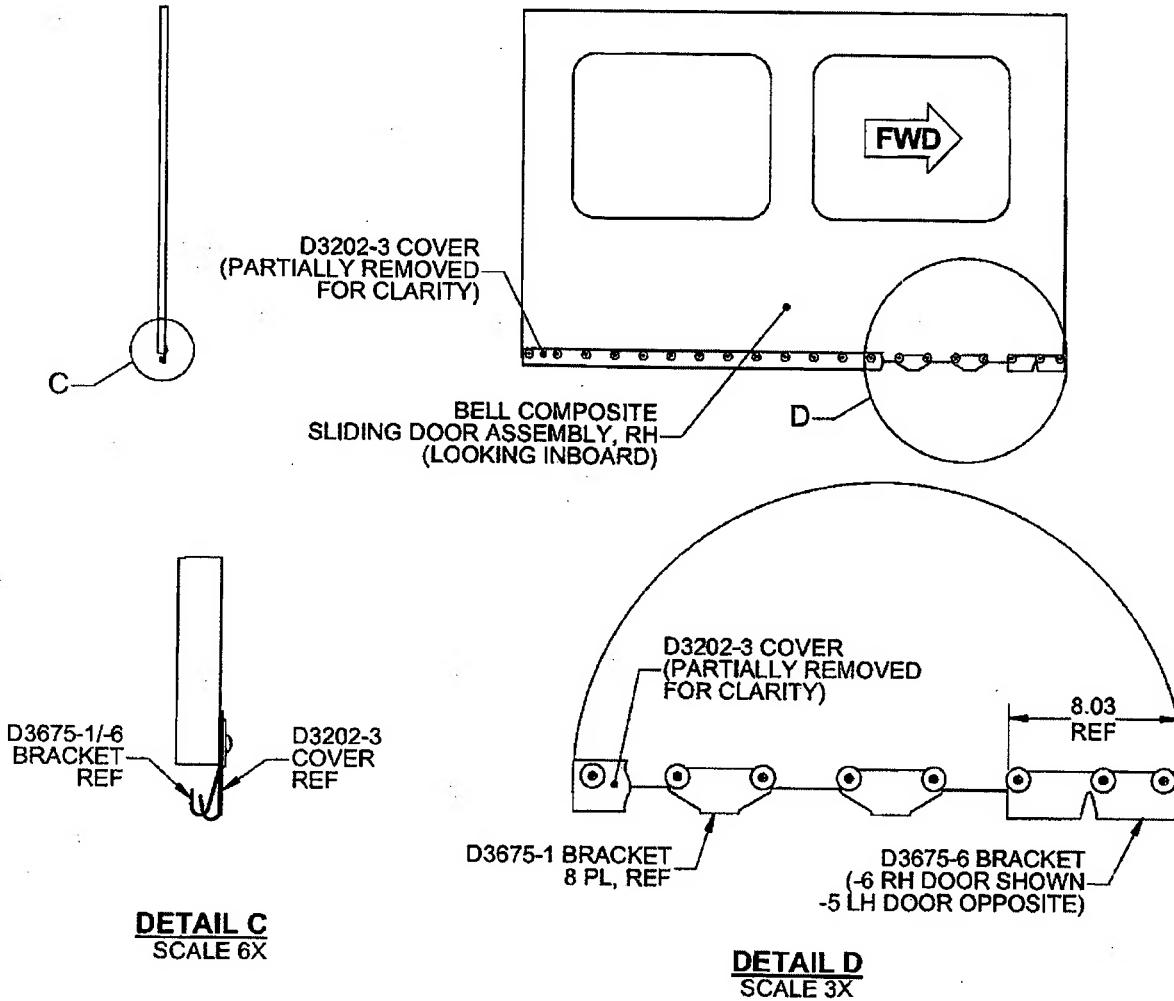
WEIGHT AND BALANCE

Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH	
DAO # 01-O-01	
APPROVED 	
BY:	D. SHEPHERD (DE # 02)
DATE:	11.03.21
CERT. NO.:	SH92-43
ISSUE NO.:	5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE	BY	09.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		D412-698-027/-028/-037/-038 Kits	NTS
DATE	11.03.21	COPYRIGHT © 2009 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SHIPPED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 85377 ML J
 12/02/07



**FIGURE 2: D3675-5/-6 BRACKET INSTALLATION ON COMPOSITE DOORS
(-6 SHOWN, -5 OPPOSITE)**

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	11.03.21
CERT. NO.:	SH92-43
ISSUE NO.:	5

DESIGN	11	DART AEROSPACE LTD	
DRAWN	11	HAWKESBURY, ONTARIO, CANADA	
CHECKED	TAD	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 3 OF 3
APPROVED	MP	TITLE	
DE APPR.	MP	D412-698-027/-028/-037/-038 Kits NTS	
DATE	11.03.21	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43
REF. FAA STC: SR01446NY
REF. EASA.IM.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket.
Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

PARTS LIST

QTY -027	QTY. -028	QTY. -037	QTY. -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
				D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

WEIGHT AND BALANCE

Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
 APPROVED	
BY:	<i>[Signature]</i>
D. SHEPHERD (DE # 02)	
DATE:	11.03.21
CERT. NO.:	SH92-43
ISSUE NO.:	5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE	<i>[Signature]</i>	09.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	D412-698-027/-028/-037/-038 Kits NTS	
DATE	11.03.21	COPYRIGHT © 2009 BY DART AEROSPACE LTD, THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Work Order ID 85380

June-07-12 9:20:37 AM

85380

Page 1

Item ID: D412-698-037

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Bracket Assembly, LH (Composite Doors)

Stop

NS2

Start Date: 07/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 21/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJDate: 12/06/07 Tooling:

Date:

Run

Start

NR1

QC: _____

Date: _____ SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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DSI 9484	C
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100

100

DC

Document Control

Memo

0.00

0.00

JB Srdotlos

J for MLJ 12-6-27

110

110

Packaging

Packaging

Pick Kit

0.00

Memo

0.00

1 12/06/27 JB
Srdotlos

120

120

QC

Quality Control

QC4- 100% Inspect kits for completeness

0.00

Memo

0.00

Srdotlos

(S)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 85380

June-07-12 9:20:37 AM

85380

Page 2

Item ID: D412-698-037

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Bracket Assembly, LH (Composite Doors)

Stop

NS2Start Date: 07/06/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 21/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130 Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-698-037/ DS1 9484 Location: _____ PPP rev: <u>B</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140 QC	Memo	0.00							
Quality Control									

12/7/13MF
12-07-03SP
12-6-28
12-7-3

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-07-12 9:20:40 AM

Page 1

Work Order ID: 85380

85380
D412-698-037

Parent Item: D412-698-037

Parent Item Name: Bracket Assembly, LH (Composite Doors)

Start Date: 07/06/2012

Start Qty: 1.00

Required Date: 21/06/2012

Required Qty: 1.00

Comments: IPP Rev:A 11.01.11 new issue DD verified by:EC
11.03.31 AS PER ECN11-531 verified by:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3675-5		Manufactured	No		110		Each	3.0000		1			

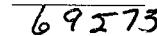
D3675-5
Sliding Door Bracket

Location	Loc Qty	Loc Code
ST236A	3	
69573	3	69573



JB 12/06/2012

**



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION

AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43

REF. FAA STC: SR01446NY

REF. EASA.M.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-0111-0112-0117 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-032/033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-0111-0121-0117 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket.
- 4) Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 5) Torque hardware per ICA-D412-698.
- 6) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 7) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

PARTS LIST

QTY	QTY.	QTY.	PART NUMBER	DESCRIPTION
-027	-028	.037	-038	D412-698-027 BRACKET KIT, LH (ALUMINUM DOORS)
X	X			D412-698-028 BRACKET KIT, RH (ALUMINUM DOORS)
	X			D412-698-037 BRACKET KIT, LH (COMPOSITE DOORS)
		X		D412-698-038 BRACKET KIT, RH (COMPOSITE DOORS)
1			D3199-3	FORWARD BRACKET, LH
1			D3199-4	FORWARD BRACKET, RH
	1		D3675-5	FORWARD BRACKET, LH
		1	D3675-6	FORWARD BRACKET, RH

WEIGHT AND BALANCE

Installation	Weight	Lateral	Longitudinal	Applicability	
	Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 in +1.22 m	+7.68 in-lb +0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg

CANADA	DEPARTMENT OF TRANSPORT	AIRCRAFT CERTIFICATION	BRANCH	DAO # 01-0-01
APPROVED	D. SHEPHERD (DE # 02)			
BY:	DATE: 11.03.21			
CERT. NO.: SH92-43	5	DE APPR.	APPR.	DATE: 11.03.21
ISSUE NO.:		DE APPR.	APPR.	DATE: 11.03.21

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED	MB	10.12.17
A	NEW ISSUE	BY	09.10.16
REV.	DESCRIPTION	DATE	
DESIGN			
DRAWN			
CHECKED	AS	DRAWING NO.	
MFG. APPR.	N/A	DSI 9484	REV. C
APPROVED	W/M	TITLE	SHEET 1 OF 3
DE APPR.	W/M	D412-698-027/-028/-037/-038 Kits	SCALE
DATE		NTS	NOT TO EXCEED ONE YEAR FROM DATE OF ISSUE

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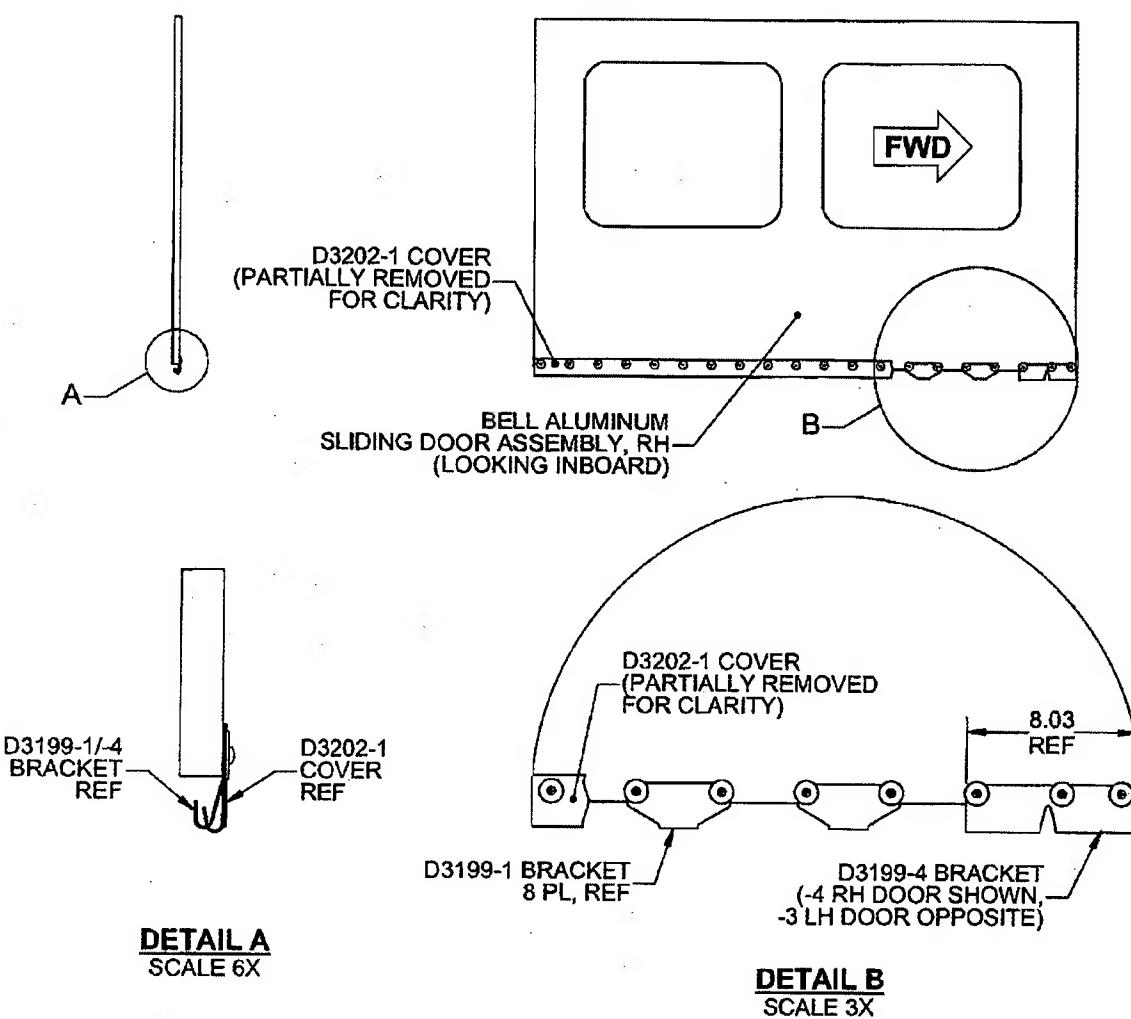
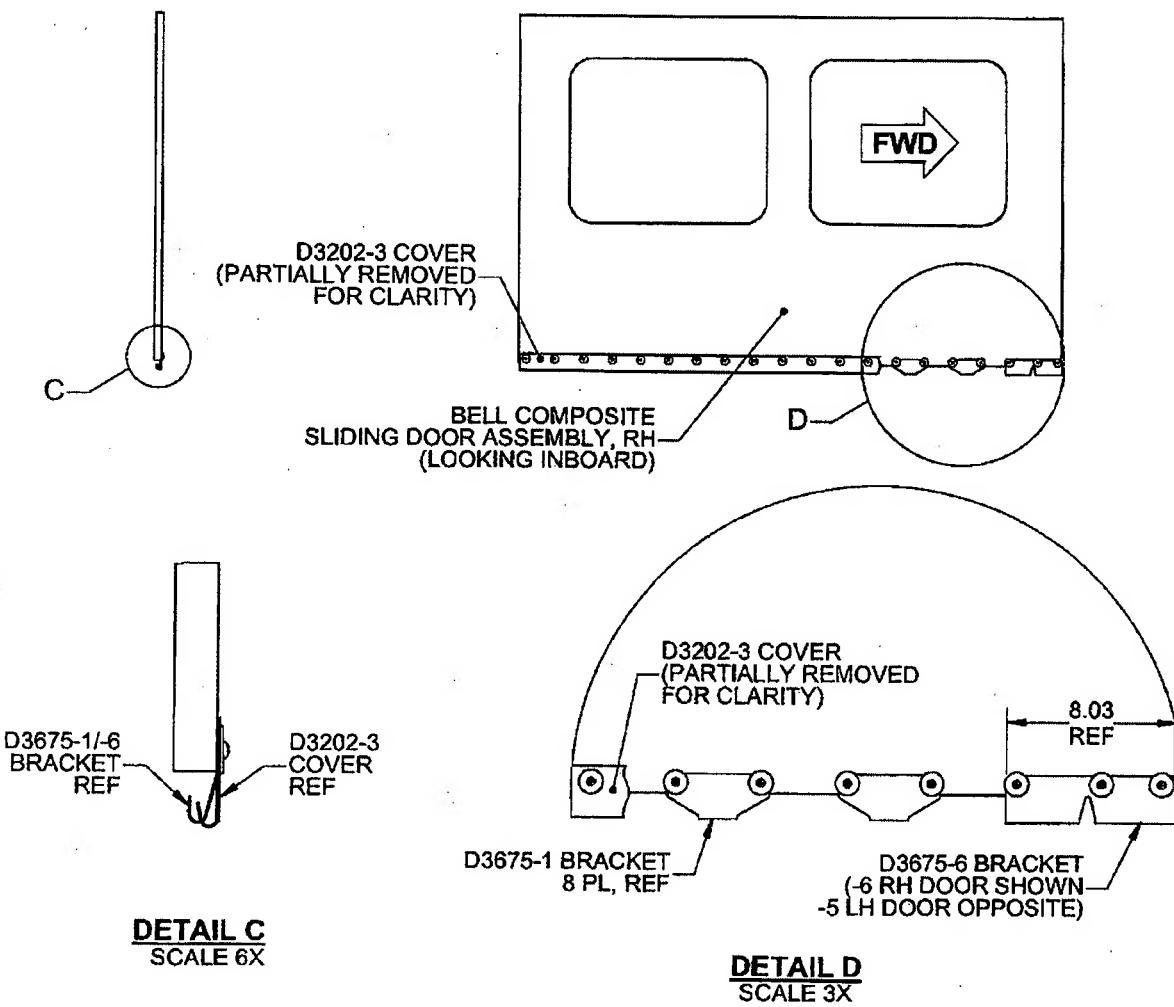


FIGURE 1: D3199-3/-4 BRACKET INSTALLATION ON ALUMINUM DOORS
(-4 SHOWN, -3 OPPOSITE)

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	11.03.21
CERT. NO.:	SH92-43
ISSUE NO.:	5

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N/A	DS1 9484	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	D412-698-027/-028/-037/-038 Kits NTS	
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**FIGURE 2: D3675-5/-6 BRACKET INSTALLATION ON COMPOSITE DOORS
(-6 SHOWN, -5 OPPOSITE)**

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	11.03.21
CERT. NO.:	SH92-43
ISSUE NO.:	5

DESIGN	DRAWN	DART AEROSPACE LTD	
DRAWN	DA	HAWKESBURY, ONTARIO, CANADA	
CHECKED	TAS	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 3 OF 3
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	D412-698-027/-028/-037/-038 Kits	NTS
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03/2021

DART SERVICE INSTRUCTION

**TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION**

REF. TCCA STC: SH92-43
REF. FAA STC: SR01446NY
REF. EASA.I.M.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket. Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

PARTS LIST

QTY -027	QTY. -028	QTY. -037	QTY. -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
	1			D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

WEIGHT AND BALANCE

Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
 APPROVED <i>[Signature]</i>	
BY:	D. SHEPHERD (DE # 02)
DATE:	11.03.21
CERT. NO.:	SH92-43
ISSUE NO.:	5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE	<i>[Signature]</i>	09.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	D412-698-027/-028/-037/-038 Kits NTS	
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